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κρέας, *kravíh* and the original nom.-acc.sg. of the IE *s*-stem neuters

1.1. – Today's *communis opinio* concerning the ablaut-pattern of the IE neuters in **-s-* is based on a paper by Jochem Schindler (1975:259-267). In this paper he argued that the directly reconstructable paradigm **mén-os ~ mén-es-(os)* replaced an older pattern **mén-s ~ m(ḡ)n-és-(s)*. The oblique stem is of minor concern for the present discussion. It is reconstructed with zero-grade in the root and accented *e*-grade in the suffix to account for cases like Lat. *frīgus*, Gr. *ῥῖγος* or Ved. infinitives of the type *ṛcáse* and demonstrates the basically proterokinetic pattern of these stems (Schindler 1975:261, 264-265). Less convincing is in my opinion the reconstruction of the nom.-acc. with suffixal zero-grade. Essentially this is based on the following arguments: First, there is the parallelism with other proterokinetic stems. This topic will be discussed at the very end of this paper (4.). Second, the Gr. neuters in *-ας* and the IIr. stems in **-is-* could be understood as reflecting an older stage with zero-grade of the suffix in the nom.-acc. The evaluation of this argument makes up the main part of my presentation (2. and 3.).

1.2. – Schindler's third and last argument consists of a few aberrant forms in IIr. (1975:266). These are the Av. verbal compounds *mązdā-* 'to perceive' and *yaoždā-* 'to make whole' both of which are attested with tmesis once (Y. 44.9 and Y. 9.31). In addition *māng* and *yaoš* are used elliptically in OAv. This elliptical use is also attested by Ved. *yóḥ* 'hail!'. That **mans-d^{ha}H-* too is of IIr. date is suggested by Ved. *mandhā-tár-* 'devout person' which should be analyzed as a derivative of the compounded verb rather than as a nominal compound with a stem in *-tṛ-* as second member. In Schindler's view IIr. **mán-s* and **iáu-š* must have been independent word forms because verbal compounds with nominal first members did not exist in IE. I share his opinion that such compounds are out of place in *Proto-IE*, but that they *did* actually exist in IIr., precisely with the root **d^{he}h₁-* as second member, is shown by Av. *zrazdā-*, Ved. *śrád-dhā-* 'trust'. The Av. form shows that this formation predates the change of groups of dental stops to sibilant plus dental stop in Ir. Nevertheless tmesis

is attested both in Av and in Ved.¹ Considering this, one should not rely too much on IIr. **manzdhā-* and **īauždhā-* because they might owe their suffixal zero-grades to the fact that they are compounded forms.² But without the evidence of IIr. **mán̥s* and **īáuš̥* the assumption of an original nom.-acc. ***mén-s* is based only on the neuters in *-is-* and *-ας* and especially on the sole word equation in this group: Gr. κρέας and Ved. *kravís-*.

2.1. – Let us turn to the IIr. forms first. This small group of about thirty stems all in all is usually assumed to have two different sources.³ Beside the examples reconstructed as *s*-stems from *set* roots with zero-grade of the suffix – for example Vedic *kravís-* ‘flesh, gore’ or Avestan *stairiš-* ‘sacrificial grass’ – there are clear cases of secondary derivatives to stems in *-i-*. Even Schindler concedes this possibility, although he under-rates the amount of examples that may contain IE **i* (“... wobei im Ar. unklar bleibt, wieweit auch altes **-is* beteiligt ist.” [1975:265]), and does not quote any of these cases.

2.2. – An illustrative case is Ved. *śócís-* ‘light, flame’ (RV+). The root *śuc-* is clearly *aniṭ* as is shown by *śukrá-* ‘bright, white’. This stem also hints at the interpretation of *śócís-*, as beside *śukrá-* we find *śúci-* ‘bright, white’ (RV+) and – in the compound *sahásra-śokas-* ‘spitting a thousand flames’ (RV 10.96.4) and the YAv. derivative *saočahin-* ‘flaming’ – a regular stem in **-as-*. Together with *śócīṣṭha-* these stems form a quite clear case of a Caland system (Nussbaum 1976:1, 13, 75 and 105), which makes it most likely that the regular stem in **-as-* was modified under the influence of *śúci-* and maybe *śócīṣṭha-*. I prefer this interpretation to the at first glance simpler assumption of a secondary derivative from another *i*-stem *śócí-* ‘shining’, because this

¹ Yt. 9.26 (*zrasča dāṭ*) and e.g. RV 10.39.5 (*śrād arí yáthā dádhat*).

² Compounded forms and derivatives must be excluded from a discussion of paradigmatic ablaut-patterns, because they do not allow firm conclusions about their bases (cf. Schindler 1975:260).

³ See e.g. Wackernagel/Debrunner (1954:364-367). Only Émile Benveniste (1935:31-35) has tried to explain all the IIr. stems as containing IE **i*: “Mais *xrviš-* ne peut être séparé de *xrvi-* forme de composition, non plus que skr. *çociṣ-* d'av. *saoči-*. Ceci donne la clé de la formation.” (1935:34) But his approach is generally ignored because of the untenable explanation he gives for the Gr. neuters in *-ας* (see below 3.1.).

is attested in the RV only as the second member of compounds and only in the vocative. Possibly *śukrá-śoce* and the like are analogical creations from the ambiguous nominative *śukrá-śocih*, which can be taken as a *bahuvrīhi* compound with *śocís-* as its second member. Further there is another bit of evidence showing that *śocís-* was liable to the influence of *śúci-*: The RV attests two instances of a derivative in *-mant-* of this stem. Once we find expected *śociṣ-mant-* (RV 2.4.7), but in the other case, where a nom. pl. *śúcayaḥ* stands next to it, we read *śuciṣ-mant-* (RV 6.6.4a: *yé te śukráśaḥ śúcayaḥ śuciṣmaḥ*).

The accent of *śocís-* is expected, inasmuch as the majority of *is*-stems show accented *-ís-*, but it seems awkward to derive a stem with accented suffix out of a contamination of two root accented words. I assume this complication is caused by *śúci-*, since this can be taken as a decompositional stem (Wackernagel/Debrunner 1957:61) and the Caland *i*-stems attested as first members of compounds are usually accented on the suffix.⁴ Therefore I suggest that the accent of *śúci-* is secondary⁵ and that the actual contamination took place between the *s*-stem and the original Caland *i*-stem **śucí-°*.

Another clear example along the same lines is Ved. *rocís-* ‘light’ (RV+). Although some *seṭ* forms from the root *ruc-* are attested (e.g. *rucitá-* AVP+), there is ample evidence that originally it was an *aniṭ* root (e.g. *rukma-* ‘name of a jewellery’ RV+, *rukṣá-* ‘shining’ RV 6.3.7). Again the stem in *-is-* is embedded in a Caland system. Beside it we find the stem in *-ma-*, an *s*-stem (Av. *raočāh-* ‘light’ and Ved. *svá-rocas-* ‘self-gleaming’ TB)⁶, and the *i*-stem *rúci-* ‘light, splendour’ (AV+).⁷ Again the easiest way to account for *rocís-* is to understand it as a modification of **rócas-* under the influence of *rúci-*.⁸

⁴ cf. *tuví-* (below 2.4.) and Wackernagel/Debrunner (1957:59sq.).

⁵ Although the reasons for this secondary accentuation are not obvious to me. One possibility may be that it was taken from adjectives of the type *cákri-* (Wackernagel/Debrunner 1954) with their in the majority of cases accented reduplication.

⁶ On *rókaḥ* (RV 6.66.6: *róka-* m. or *rókas-* n.?) see Nowicki (1976:105sq.).

⁷ See Schindler (1972:41) against a paradigmatic connection between *rúci-* and the root noun *rúc-* f. ‘light, splendour, reputation’ (RV+).

⁸ Again I assume an original **rucí-°*. The accent of *rúci-* can be due to its being a substantive.

A few more examples derived from *aniṭ* roots can be explained along these lines, although not all of them are as evident as *śocís-* and *rocís-*. Whereas I am confident that cases like *bhrājiṣ-mant-* ‘flickering’ (Br.)⁹ or *rohis-* ‘a certain kind of deer’ (Lex.)¹⁰ are best explained as contaminations of *s-* and *i-* stems, or – as I would prefer with *arcís-* ‘beam, flame’ (RV+)¹¹ and *bhujiṣ-yà-* ‘useful’ (AV+)¹² – as derivatives in *-s-* from the *i-* stems, this is not entirely clear in other examples: Such an interpretation of *barhís-* (RV+) and YAv. *barəziṣ-* ‘sacrificial grass’ depends on the assumption that *°-barhas-* ‘strength’ (in *ádri-barhas-* RV+ ‘firm’) and Germ. **βalyi-* (in e.g. MHG *Balg*, ME *belly*) come from the same root (**√b^helġh-* ‘swell’), or that the forms in question were associated strongly enough with the reflexes of the root **√b^herġh-* ‘high’ in IIr. to make an influence of its well developed Caland system (e.g. Av. *bərazant-* ~ *bərazi-°* ~ *bərazah-*) plausible.¹³ In the case of *sarpís-* ‘ghee’ (RV+) a similar interpretation is not impossible, since an *i-* stem **srpí-* (or the like) would not be out of place beside *srprá-* ‘greasy’ (RV) and Gr. ἔλπος ἔλαιον, στέαρ, εὐθηνία (Hsch.)¹⁴. However as **srpí-* is not attested at all and the *s-* stem is only found outside of IIr., it seems easier to assume that *sarpís-* owes its suffix to *havís-* ‘pouring, offering’ (RV+). On the other hand this stem itself is not very decisive: Although one could presume a coexistence of *s-* and *i-*

⁹ Beside *bhrāji-* (MS), and *bhrājas-* (RV+) ‘brightness’. *√bhrāj-* is *aniṭ*, cf. *vībhrāṣṭi-* f. ‘flaring up’.

¹⁰ *rohis-* and *róhi-* ‘a certain kind of gazelle’ (Ep.) belong to the root **h₁reudh-* ‘red’ (*róhita-* RV+ = YAv. *raoiḍita-* ‘red[dish]’). The evidence for a Caland system from this root includes an *i-* stem (in *rudhi-krá-* ‘Name of a demon’ RV 2.14.5, and indirectly in *rudhirá-* ‘red, bloody’ AV+ < **rudhí-* × **rudhrá-* [cf. Gr. ἐρυθρός, etc.]; see Nussbaum [1976:14 and 64]) and an *s-* stem not attested in IIr. (cf. Gr. ἔρεθος, Lat. *rubor* ‘redness’ etc.).

¹¹ Since (apart from the infinitive *rcáse*) neither an *s-* stem nor a Caland system is attested beside *arcí-* ‘beam’ (RV+), the only alternative would be to assume productive **-is-* (taken from its synonyms *śocís-* and *rocís-*).

¹² A derivation from *bhuji-* f. ‘pleasure’ (RV) seems more plausible than a contamination with the *s-* stem in *viśvá-bhojas-* ‘providing all food’ (RV, AV), because the root vocalism agrees with the former rather than the latter.

¹³ The two roots merged completely in IIr. **√brh-* (see 1996:212sq.).

¹⁴ Gr. authors are abbreviated according to Liddell/Scott *et al.* (1996:xvi-xxxviii).

stem from *pra-hoṣ-á-* ‘offering’ (RV 1.150.2) and *havyá-* ‘offering’ (RV+) analysed as **havi+á-*, it may be more reasonable to take it as an example of productive **-is-*.¹⁵

The assumption that *-is-* was slightly productive in IIr. becomes unavoidable anyway with cases like *vartís-* ‘course’ (RV), where no *s*-stem is attested and an *i*-stem is found only in OHG *wurt* ‘luck’, or *chadís-* ‘cover, roof’ (RV+) with its variant forms *chardís-* ‘protection’ (RV+) and *śardis-* ‘protection (?)’ (AV 18.3.16).¹⁶ Here too no *s*-stem is found, and the *i*-stem attested by *náva-cchadi-* ‘with 9 roofs’ (TS) and a few similar compounds does not look like firm ground to build upon. Other cases of apparently productive *-is-* include *jyótis-* (RV+), and *dyotis-* (Kālidāsa) ‘light’, which certainly owe their suffix to the synonyms *śócís-*, *rocís-*, and *arcís-*.¹⁷

2.3. – So far all examples were from *aniṭ* roots and therefore rather uncontroversial. Now turning to *seṭ* roots, basically the same picture emerges. The only difference between the two groups is that with *seṭ* roots only the free forms in *-is-* are of any use. Whereas above an example like *bhrājiṣmant-* from the *aniṭ* root $\sqrt{bhrāj-}$ and a free *is*-stem like *sarpís-* had basically the same value for this investigation, this is not the case with *seṭ* roots. Unlike *bhrājiṣmant-*, which certainly contains *-is-*, something like *māhiṣvant-* ‘powerful’ (RV 7.68.5) alone is no evidence for the existence of **māhis-*. Rather *mahiṣá-* ‘buffalo’ (RV+) and similar derivatives can be compared with cases like *vatsá-* ‘calf’, which obviously cannot suggest a stem **vats-*, but owes the suffixal zero-grade to a weakening of the stem in derivation.¹⁸ When a laryngeal precedes the suffix, such a weakening produces forms that look like stems in *-is-* (e.g. **méḡ-h₂-os* [>

¹⁵ Note the frequent occurrence of ritual terms among the stems in *-is-*, and in particular the parallelism between *havis-*, *havyád-* (RV 7.34.14), *havyavāhana-* (RV+) and *kravis-* (below 2.4.), *kravyád-* (RV+), *kravyavāhana-* (RV 10.16.11).

¹⁶ Both variants should be analysed as contaminations of *chadís-* with *śarman-* ‘protection’ (RV+). See Dunkel (1987:12) for *chardís-* and Sāyaṇa’s commentary *ad loc.* for *śardis-*.

¹⁷ A possible trace of an *s*-stem is found only in *jyótsnā-* ‘moonlight’ (MS, Br.+), which could also contain a complex suffix **-snā-* (cf. Lat. *lūna*, Gr. *σελήνη*), and the *i*-stems *jyoti-*, *jyuti-*, and *dyuti-* are late and scarcely attested.

¹⁸ **uét-os* (Gr. *ἔτος* ‘year’) + *-ó-* → **uēt-s-ó-*. In some such examples not only the suffix, but also the root is weakened: e.g. **rócas-* → *rukṣá-* (cf. above 2.2.).

máhas-] + *-ó-* → **meġ-h₂-s-ó-* [> *mahiṣá-*]). Such examples evidently have no implications whatsoever for the shape of the stems they are based upon, since the derivatives of e.g. **máhis-* and *máhas-* would be indistinguishable. Nevertheless these forms have sometimes to be examined, because there is no consensus on the development of laryngeals in internal syllables in Av.¹⁹ So if one believes that Av. *mazišuuant-* (name of a mountain) cannot contain a reflex of the laryngeal, the Caland system built on the IE adjective stem **meġ-h₂-* has to be taken into consideration.²⁰ The reason why I favour the explanation by weakening of the regular *s*-stem in this case is that most true stems in *-is-* are accented on the suffix. Similar cases are *avišyú-* (RV+), *avišyánt-* (RV) ‘eager to eat’, and *avišyá-* ‘eagerness to eat’, which are probably related to *ávas-* ‘help, support, etc.’ (*pace* Mayrhofer 1992:134) and contain its weakened stem **HáuH-s-*. Also *támisrā-* ‘dark night’ (RV 2.27.14, Br.+) with its Lat. cognate *tenebrae* ‘darkness’ (< **temasrā-*) is best taken as a derivative of the regular *s*-stem (Ved. *támas-*, Av. *tamah-* ‘darkness’) of the *seṭ* root **temh₂-*, although this root shows Caland suffixes too.²¹

2.4. – With the above considerations in mind, I shall now turn to those examples that are usually used to establish a class of *s*-stems with root final laryngeal and zero-grade of the suffix.²² Naturally the most important case is Ved. *kravís-* ‘(raw) meat’ (RV+), which is believed to have an exact cognate in Gr. κρέας. But when we take a closer look at the IIr. forms, nothing distinguishes this example from those discussed so far: Beside *kravís-* we find YAv. *xruuišiiant-* ‘cruel’, which cannot directly go back to **kruH-s-* and must therefore be influenced by the Caland *i*-stem found in *xruui-dru-* ‘with bloody club’. In fact there are at least traces that in Ved. too a stem in *-i-* existed beside *krūrā-* ‘bloody, cruel’. In the Kāṇva version of the White YV *krávi-* qualifies the name of Rudra, so that a translation ‘bloody’ is perfectly fitting (VSK 11.6.6.:

¹⁹ On this topic see Tichy (1985:229-244), Ravnæs (1981:247-273), Beekes (1981:275-287). Of course the forms under discussion here make up quite a significant part of the evidence.

²⁰ See Nussbaum (1976:99sq.): Ved. *máhas-* (RV+) = YAv. *mazah-* ‘magnitude’, Hitt. *mekki-* ‘much’ < **méġ-h₂-i-* (vs. *mek* nom.-acc. sg. n. < **méġ-h₂-Ø* [see Melchert 1994:87]), etc.

²¹ Ved. *tāmrā-* ‘dark red’, OIr. *teim* ‘dark’, etc. (see Nussbaum 1976:75sq.).

²² Schindler (1975:265) quotes *kravís-*, *təuuiš-*, *stairiš-* and *snaiθiš-*.

rúdra yátte krávi páraṃ náma ‘O Rudra what a *bloody foreign name you have’).²³ Moreover the assumption of such a stem is the easiest way to account for *ákravīhasta-* ‘without bloody hands’ (RV 5.62.6),²⁴ and finally one might even see this stem in *kravyád-* ‘eating carcass’ (RV+), which is in fact attested earlier and better than its presumed first member *kravyá-* ‘body, carcass’ (1x AVP, TS, MS; late).²⁵ All in all there is no reason – aside from Gr. κρέας – why *kravís-* should not have been created along the same lines as described for the *aniṭ* roots above. Closely connected with *kravís-* is its synonym *ámis-* ‘meat’ (RV), which is usually derived from a root $\sqrt{(H)\bar{o}m(H)}$ - or similar.²⁶ But in fact when a root final laryngeal is reconstructed then this is done only because of *ámis-*. On the other hand no stems in *-i-* or *-s-* from this root are known. Therefore I prefer to analyse this stem as containing productive *-is-* taken from its synonym *kravís-*.²⁷

An at first glance even clearer example than *kravís-* is OAv. *tauuiš-* ‘cruelty’ (Y. 29.1). Beside this a regular *s*-stem is actually attested both in Av. (YAv. \circ -*tauuuh-* ‘strength’) and in Ved. (*tavás-* ‘strong’ RV+), where we find a Caland *i*-stem *tuví-* (RV+) too. Again, the assumption that the stem in *-as-* was influenced by the compositional *i*-stem seems obvious. Nevertheless this might not be the whole truth, because some Ved. forms belonging here tell a different story. Beside *taviṣá-* ‘strong, brave’ (RV+),

²³ See Bloomfield (1932:29) and Sharma (1959/60:107) on the numerous variants in the texts of the different YV schools.

²⁴ Scarlata (1999:36) assumes that a Caland *i*-stem $\sqrt{*kruvi-}$ (= Av. *xruui-*) was changed to *kravi-* under the influence of *kravís-*.

²⁵ The very first occurrence of *kravyá-* is the compound *kravyavāhana-* (RV 10.16.11 used as an epithet of Agni), which is best taken as an analogical formation after Agni’s common epithet *havyavāhana-* (RV+). Therefore I suggest that *kravyá-* was in fact extracted out of these compounds. This interpretation implies that *kravyád-* is analysed as containing *kravi-* (from *ákravīhasta-*) and *-ád-* taken from a compound like *viśvád-* ‘eating all’ (RV+). See Scarlata (1999:34sq.) for a discussion of the cases attested in the RV.

²⁶ See Mayrhofer (1992:170) for a discussion of the various proposals concerning the interpretation of the long root vowel.

²⁷ Thus already Wackernagel (1957:13). The unexpected accentuation may stem from a presumable substantive $\sqrt{*áma-}$ ‘(raw) meat’ beside adjectival *āmá-* ‘raw’.

which could reflect either **taṁHs-á-* (from **táṁHas-*) or **taṁHiš-á-* (from **táṁHis-*), is found *táviṣ-* f. ‘strength, power’ (RV). This formation is of IIr. date, as is shown by Av. *tauuīš-* ‘strength, might’. Its accent and that of *túviṣmant-* ‘strong, powerful’ (RV+), which cannot go back to **túHs-mant-* and should therefore be taken as a replacement of older **táviṣmant-* influenced by *tuví-°*, favor a direct derivation from **táṁH-as-* (thus **táṁH-s-iH-* and **táṁH-s-mant-*).²⁸ If this holds true, it becomes tempting to consider the hapax *tauuīš-* as a back-formation from the better attested *tauuīš-*. This approach is however hampered by the uncertainties surrounding the reflexes of the IIr. laryngeal in Av. If loss of the laryngeal in internal syllables is regular, and *tauuīš-* is traced back to **táṁHsiH-*, this must owe its second syllable to the influence of *tauuīš-*.²⁹ The only way to maintain the assumption of a back-formation in such a framework would be to place it in IIr. times, where **taṁHs-* (realised as **taṁəs-*)³⁰ could have influenced **taṁHs-*. This was thus realised as **taṁəs-*, which accounts for Av. *tauuīš-* with its unexpected laryngeal reflex. If such a scenario is rendered impossible by new insights on the development of laryngeals in Av., one can still resort to **táṁHas-* × **tuHí-* → **taṁHís-* and explain the accentuation of the Ved. derivatives along the lines of note 28. Either way no IE **téṁh₂-s* is necessary.

²⁸ Or one could ascribe the accent of *táviṣ-* to a substantivisation of adjectival *taviṣá-* / **taviṣ́-* and that of **táviṣmant-* to *távasvant-* (RV 9.97.46). But since the latter is much rarer than *túviṣmant-*, I do not think this is preferable. The only form with accented *í* in this group (*tuvíṣtama-* ‘strongest, most superior’ RV, AV) should not be taken at face value, because its associated comparative *tavástara-* (RV) rather suggests that it is a replacement for **tavástama-*. Again influence of *tuví-°* (and *túviṣmant-*, one of the associated positives) must be assumed, be it directly on **tavástama-* or maybe on something like **taviṣtama-* created by contamination of **tavástama-* with **taviṣtha-* (presupposed by *távīyas-* RV+) and/or **táviṣmant-*.

²⁹ The explanation that it has been created *after* the development of **H > *i* in the final syllable of **taṁHs-* (Ravnæs 1981:254), is disfavored by the attestations of *tauuīš-* and *tauuīš-/táviṣ-* and of course *argumenti causa*.

³⁰ I write **ə* (> Av. *i/ī*) and **H* (> Av. *Ø*) for the allophons of **/H/* in IIr. Though their exact distribution is still a matter under discussion (see e.g. Ravnæs [1981:261-267] for different positions taken in this matter), it is not very audacious to assume that **/H/* was **ə* in final syllables (hence **taṁəs-*) but basically **H* internally (hence **taṁHs-*). As soon as forms like **taṁəs-* exist, the split of course becomes phonemic.

Less decisive is the case of YAv. *stairiš-* ‘sacrificial grass’ belonging to the *seṭ* root **sterh₃-* (Ved. *str̥ṇāti* etc.). *i*-stems are found only in OIr. (*fossair* ‘straw’ and *cossair* ‘bed’), and a stem in *-s-* is not attested at all. Rather than force a direct connection with the Celtic forms, I suggest that this stem contains productive *-is-*. This is especially likely since *stairiš-* is attested three times directly beside and a fourth and last time in proximity of its synonym *barəziš-*, which has a Ved. cognate in *barhís-* and should therefore be reconstructed already for IIr.³¹

vyáthis- ‘tottering, shaking’ (RV) is also not very clear. From the root *vyath-*, which lacks clear cognates outside of IIr. (see Mayrhofer 1996:591), we find *avyathí-* ‘not shaking’ and *vithurá-* ‘tottering, unsure’ (both RV+). Therefore an explanation with Caland suffixes is possible, but – due to the lack of a stem in *-s-* – less probable than in the other cases. Furthermore the *-i-* of *avyathí-* itself is sometimes taken as reflex of the laryngeal (Wackernagel/Debrunner 1954:296). Therefore it is possible that the form was created in IIr. by extension with *-s-* after the vocalisation of the laryngeal. The use of the zero-grade of the suffix would be no surprise at a time when the phonetic realisation of the laryngeal was already a vowel. But perhaps here too we have simply a case of productive *-is-*.³²

From *páthis-* ‘dwelling place’ only a locative *páthiṣi* is found once in the YV (KS 16.18 and parallels), later the word occurs only in lexicographic works. This scanty attestation stands in sharp contrast with the synonymous *páthas-* (RV+).³³ The passage

³¹ The inversion of this argument – namely that *barhís-* / *barəziš-* was created after *stairiš-* (thus e.g. Wackernagel/Debrunner 1954:366) – is less likely because of the broader attestation of *barhís-* / *barəziš-* and its being easily motivated in the framework presented here.

³² Similar to this is Av. *snaiṭiš-* ‘weapon’. The root *snath-* ‘hit’ (= Ved. *śnath-* ‘pierce’) is only scarcely attested and lacks clear cognates outside of IIr. Therefore it is no surprise that no decisive forms to explain this example are found. Either productive **-is-* or IIr. **ćnat^hə-+-s-* can be posited.

³³ Meaning as well as etymology of *páthas-* are not entirely clear (see Schmidt [1973:1-39] for the former and Mayrhofer [1996:119sq.] for the latter). I suggest a basic meaning ‘enclosed pasture’ or the like and an etymological connection with the root **peth₂-* ‘spread out’: An *s*-stem to this root (**páthas-* ‘plain’) influenced by the root *pā-* ‘protect’ would neatly account for both form and meaning of *páthas-*.

in the YV consists of a rather long sequence of identical sentences with only the locatives replaced each time. Now two of the sentences preceding the one attesting *páthiṣi* contain the locatives *jyotiṣi* and *sádhiṣi*, which makes it extremely probable that *páthiṣi* is an artificial form created *ad hoc*.

Ved. *sádhis-* ‘seat, abode’ and YAv. *hadiš-* ‘deity of the abode’ and OPers. *hadiš-* ‘residence’ are usually thought to be cognate with Lat. *sēdēs* ‘seat’ (see Kuiper 1942:23-29, Nowicki 1976:131), but this equation raises a few questions that are not so easy to answer. First the vocalism of Lat. *sēdēs* agrees with *sēdeō*, but not with the supposed Ilr. **sád-H-s-*; second the alternation of short and long *e* in the root (**séd-* for Lat. but **séd-* for Ilr.) would argue for an acrostatic paradigm, which leaves no room for *ablaut* in the suffixes to account for Lat. *-ēs* (< **-eh₁-(e)s*) vs. Ilr. **-H-s*. Furthermore it is by no means undisputed that **h₁* like **h₂* aspirated a preceding plosive.³⁴ Therefore I would prefer an alternative solution which in fact can be found thanks to an erroneous entry in Grassmann (1873:1464). He sets up a stem *sá-dhi-* for RV 8.43.9, where we rather should read *sádhiḥ* as the nom.-acc. of *sádhis-*. But a compound **sa-dhí-* could indeed have meant ‘seat’ or ‘abode’³⁵ and a contamination of this with the well attested synonym *sádas-* can have produced *sádhis-*.³⁶

To sum up, I think I have shown that Ilr. **-is-* is best understood as a complex suffix created within the cluster of Caland suffixes comparable to **-iro-*, **-ulo-*, **-nes-* and the like (see Nussbaum 1976:62-97). It is also obvious that **-is-* was slightly productive in Ilr. For brevity's sake not all stems in **-is-* were discussed in the paragraphs above. The few remaining cases (e.g. Av. *sōiḍiš-*, *tbiṣiš-*, *vīṭiṣ-*, or Ved. *kīlbiṣa-*, *timīṣa-*) are simply too unclear to allow any conclusions.

³⁴ Thus e.g. Olsen (1994:267) with further references.

³⁵ This would rather be a stem in *-i-* than a reflex of the laryngeal (see Klingenschmitt 1980:214 note 14 and Scarlata 1999:266sq.). According to Scarlata (1999:268) the stems in **-dhí-* are typically *nomina rei actae* (e.g. *nidhí-* ‘what is set down’) or *nomina loci* (e.g. *iṣudhí-* ‘where the arrows are placed’). Thus **sadhí-* ‘place where something (e.g. people) are put together’.

³⁶ The synonymous stem *sadhástha-* (RV+) is coined on *upástha-* (RV+), as is shown by the otherwise unexpected accent.

3.1. – Now turning to the Gr. forms, the situation is quite different. Gr. stems in -ας have – except for a few very special cases (e.g. ἄλας, -ατος ‘salt’ Arist.+ < acc. pl. ἄλας or δοῦρας AP 6.97.5 backformed from δούρατα Il.+) – no other source than **h₂-plus *-s-*. So in Gr. the question is not whether these stems contain **h₂* or not, but rather *when* the stems in question were created. If it can be demonstrated that we are dealing with stems created within Gr., the use of the zero-grade of the suffix to create secondary derivatives would not be surprising, because it is likely that the laryngeals were already vocalised at that time. Naturally one can only hope to discern when and how a stem is created if it has a reasonably clear etymology. Therefore most Gr. nouns in -ας are of little use for my investigation.³⁷

3.2. – I shall not go into detail about the inflectional patterns of these stems, which in fact are very interesting and exhibit a stunning amount of variation.³⁸ Only a few short remarks are needed to exclude two explanations for the stems in -ας that come to mind easily or have actually been presented. First the assumption that they were created by paradigmatic levelling from earlier **-os ~ *-as-* with colouring by the laryngeal only in the oblique cases (thus Stüber 2002:21) is ruled out by the observation that many of the words in question are only scantily attested in the oblique cases;³⁹ furthermore they often have forms with ε instead of α in these cases.⁴⁰

³⁷ See Meissner (1995:153-157) for an overview over the attested cases.

³⁸ Just to illustrate the point I list the case forms of κέρας known to me: nom.-acc. sg. κέρας (Il.+), gen. sg. κέραιος (Arat.+), κέρως (Th.+), κέρεος (Hdt.), κέρατος (Anaxag.+), κερᾶτος (Arat.+), dat. sg. κέραι (Hdn.), κέραι (Aristonicus *De signis Iliadis* zu Il. 11.385), κέρῃ (Il. 11.385, Th.+), κέρει (Hdt.), κέραι (Th.+), nom.-acc. du. *ke-ra-e* (PY Sa 840), [κέρ]ατε (IG I² 301.109), nom.-acc. pl. κέρᾱ (Il.+),]*ke-ra-a* (KN K 872.1), κέρᾱᾱ (Hdn.), κέρᾱᾱ (Hdt.+), κέρῃ (N.T. *Apoc.*), κέρᾱτα (Epimenid.+), κερᾶᾱτα (Nic.+), gen. pl. κερᾶων (Il.+), κερῶν (Aesop.+), κερῆων (Hdt.), κερᾶτων (Pi.+), dat. pl. κέρᾱσι(v) (Il.+), κερᾶεσσι(v) (Il.+), κερᾶᾱσι (A.R.).

³⁹ An extreme example is δέμας ‘bodily frame’ (Il.+): The nom.-acc. sg. is attested hundreds of times mostly in epic and poetic texts, whereas an oblique case (δέμαϊ) is found just once in Pi. *Pae.* 6.80.

⁴⁰ E.g. βρέτας ‘wooden image (of a god)’ (A.+), where numerous forms with ε (e.g. βρέτεος A. *Supp.* 885, βρέτει A. *Eu.* 259) are found, whereas the only one with α (βρετάεσσι Nic. fr. 74.68, Ath.) is late, rare, and an obviously artificial creation after Hom. *δεπάεσσι* and the like. Actually some examples are clearly regular stems in -ος transferred to the -ας ~ -εος type: E.g. κῶας,

An account of this “ε-inflection” of stems in -ας, which I believe to be of dialectal origin,⁴¹ would take another entire paper. Another approach, namely that stems in -ας result from transfer of other stem classes through oblique cases with τ-inflection,⁴² is disproved by chronological considerations. The first occurrences of stems in τ from neuters in -ας (κέρατα ‘horns’ Epimenid.+ and τέρατα ‘signs’ Emped.+) are found in the 6th and 5th centuries B.C. Therefore only a few later cases can be explained along these lines (e.g. πεῖρας ‘limit’ Xenoph., Pi., Parm., πέρας Anaximand. for πεῖραρ *Il.*+).

3.3. – Taking a look at some of the crucial examples it is best to start with κρέας ‘meat’. In my eyes the path to its correct interpretation begins with the observation that – unlike with most other stems in -ας – the singular forms are much rarer than the plurals (e.g. nom.-acc.sg. κρέας *Od.*+, 4x in Hom. vs. nom.-acc.pl. κρέα *Il.*+, 28x in Hom.).⁴³ But its frequency is not the only surprising feature of the nom.-acc. pl. κρέα. In Hom. it must always be read with short ᾱ, but it occurs only four times before a vowel, where one could understand it as elided for κρέαα. On the other hand we find nineteen instances before consonant and the Odyssey even has four attestations of elided κρέ’. κρέᾱ is also the normal form in tragedy and comedy.

Ferdinand Sommer has argued that this form replaced κρέᾱᾱ before contraction took place, because a sequence of three short vowels was an oddity that hardly ever fits into the meter (1956/57:145-151). But the forms of the gen. pl. in Hom. make this

κώεα ‘fleece’ (*Od.*+) vs. Myc. *ko-wo* (PY Un 718.4), and δέρας ‘skin’ (E.+, with δέρωσ and δέρατος only in Hdn.) vs. δέρος (Epich.+, with δέρους in Acus., D.S.).

⁴¹ The phenomenon is probably connected with the “transfer to the -εω type” (Buck 1955:125) of verbs in -άω in some dialects. Such forms are found in Dor., NWGr., and Ion. (see Schwyzler 1953:728 and Thumb/Kieckers 1932:191). The neuters in -ας agree well with this observation: Where a stem has both inflections, the forms with ε are used prevalently by authors such as Hdt. or Hp. (cf. e.g. the forms of κέρας in note 38), and the stems with constant ε-inflection usually are first attested in Hom. or the choral lyric (cf. e.g. βρέτας in note 40).

⁴² This is Benveniste's explanation for the whole class of neuters in -ας: “les mots en -ας ne sont rien d'autre que d'anciens neutres en -αρ (*-r) passés, avec leur voyelle -α-, au type en -s.” (1935:32)

⁴³ This fact stands in sharp contrast with Ved. *kravís-*, which has no pl. forms at all.

argumentation less probable than it seems at first sight. Hom. lacks the *prima vista* expected form *κρεάων, which would fit the meter. Instead he has once κρεῶν, which he has to force into the meter, and normally κρειῶν, a variant of κρεῶν with metrical lengthening. These forms are best understood if early contraction in the sequence of three vowels °εάω° is assumed. When Hom. tried to use the resulting κρεῶν in his verses, he had to create κρειῶν because κρεάων was not available any more. This interpretation of κρειῶν raises the question why κρέᾱᾱ was not treated in a similar way. I think the answer should be as simple as possible: κρέᾱ just never was κρέᾱᾱ.⁴⁴

To understand what κρέᾱ really was, we had best turn to another example first. Alan J. Nussbaum has argued that Gr. κέρας ‘horn’ (Myc., *Il.*+) is no direct cognate of Vedic *śírah* ‘head’, but rather an independent derivative in *-s- from a stem in *-ā- attested in the Myc. instr. sg. *ke-ra* ‘horn (material)’ (Nussbaum 1986:36-45 and 149-157). The use of the zero-grade of the suffix *-s- in this example argues for a derivation *after* the vocalisation of laryngeals in Pre- or Proto-Gr. Furthermore the relation between mass noun in *-ā- and derivative in *-s- denoting an object agrees well with the observation that among the Gr. stems in -ας we find more cases denoting concrete objects than among the normal neuters in -ος.

3.4. – Now trying to adopt this explanation to κρέᾱ and κρέας one would expect κρέᾱ to mean ‘meat’ as a mass noun and κρέας to denote an object consisting of meat. In fact this is exactly the usual meaning of these forms in Hom. (e.g. *Od.*14.109 κρέα τ’ ἦσθιε πίνε τε οἶνον vs. *Od.*8.477f. κῆρυξ, τῇ δὴ, τοῦτο πόρε κρέας, ὄφρα φάγησι | Δημοδόκῳ). κρέᾱ is sometimes used as a true plural ‘pieces of meat’, but most often it denotes an unspecified amount of meat. The rare singular κρέας on the other hand always means ‘piece or portion of meat for one person’. If the semantics are in order, this raises the question of the morphological analysis of κρέᾱ and *kerā-*, which were obviously integrated into the synchronic morphologic system in different ways. The different quantity of the α may actually be only apparent. The full grade root and the

⁴⁴ I write κρέᾱᾱ and κρεάων without asterisk because although not in Hom. they are actually attested in later texts (Tyrannion, *Hdn.*+ and *h. Merc.* 130, Nic., *AP*). These forms were renewed along the productive pattern of stems without a sequence of three vowels, where the contraction may be of later date.

presence of short α in κέρας seem to hint that *kera-* was still a proterokinetic stem, when κέρας was created; whereas the Myc. form shows that the root vowel was levelled through the paradigm, it can not tell us anything about the exact form of the nom. At least in Proto-Gr., vowel gradation in the suffix of stems in $-\bar{a}-$ – which in later times is only attested for the $\iota\alpha$ -stems – may well have been intact. Therefore it is possible that the bases of κρέας and κέρας actually were formally identical at the time of their derivation.⁴⁵

For the morphological analysis of **kréua*⁴⁶ I see various possibilities. I think the first one, namely as the nom.-acc. sg. of a neuter root noun, should be ruled out, since this is a very rare category and there are no verbal forms to force us to reconstruct a root **√kreu_{h2}-*. The second and third possibilities are more attractive. **kréua* could be a singular form with zero ending from a stem in **-h₂-*, which may be a collective noun or an adjective like μέγα.⁴⁷ Both could easily mean what they should – most likely ‘gore’ in IE but ‘meat’ or even ‘roasted meat’ in Proto-Gr. – and both were an acceptable base for the secondary Caland system attested in various languages.⁴⁸ A small disadvantage of these is that we are left with a root **√kreu-*, for which only scanty

⁴⁵ Actually there is an example, where both ways to integrate a form of the structure R(é)- \bar{a} into the morphological system are attested side by side. Beside σκέπας ‘covering, shelter’ (*Od.*+, almost exclusively in epic texts) a nom.-acc. pl. σκέπᾱ (once in Hes. *Op.* 532) comparable to κρέᾱ coexists with the regular \bar{a} -stem σκέπη ‘shelter, protection’ (*Hdt.*+), which looks exactly parallel to what was expected, if Myc. *kera-* had survived in alphabetic Gr.

⁴⁶ It is certainly not an “alte Stammform” (Schwyzer 1953:516) or a “nackter, unflectierter Stamm” (J. Schmidt 1889:361).

⁴⁷ That such an adjective is the base for κρέας has been proposed by Torsten Meissner (1995:73), but as he accepts the reconstruction of Schindler (1975) he thinks this adjectival **-h₂-* was contaminated into the *s*-stem noun at an early date. Instead I propose that Meissner's younger example *práthas-* is in fact the type to be expected for IE, whereas a stem in $-\alpha\varsigma$ could only result at a later stage when **h₂* had already become **a*.

⁴⁸ I share Meissner's opinion that at least some of the roots in **h₂* with a Caland system contain a suffix **-h₂-* (1995:71sq.), although I am not convinced that this is always *adjectival* **-h₂-*. But in fact it may be pointless to ask, which **-h₂-* we are dealing with, since the amphikinetic inflection of these adjectives (see Nussbaum 1976:100) suggest that they may be internally derived from nouns in **-h₂-*.

evidence can be found. Moreover it seems quite hard to get the quasi-root-noun **kruh₂-* (e.g. OIr. *crú*, Slav. **kry*) out of such a paradigm. Therefore I prefer the fourth possibility and analyse **kréua* as nom.-acc. pl. n. of an adjective in **-u-* belonging to the root **√ker-* ‘to cut’. To get **kruh₂-* and its Caland system from this starting point becomes pretty easy once we take account of the fact that **kr-éu-h₂* is a well-formed n. pl. in Pre- or Proto-Gr., but not necessarily in IE. Forms like Skr. *dārūṇi* and also Gr. *δοῦρα* suggest that rather the strong stem was used in thenom.-acc. pl. n., so that we could expect **kér-u-h₂*⁴⁹ for IE. When this was hypostatised to form an animate substantive it may have followed an amphikinetic accentual pattern. The resulting **kéruh₂-s*⁵⁰ ~ **kruh₂-és* would then have generalised its weak stem and was subsequently treated as a root noun.⁵¹ In Gr. on the other hand, **kér-u-h₂* was replaced by **kréua*, the productive nom.-acc. pl. n. of *u*-stem adjectives (cf. ἡδέα vs. Skr. *svādūnī*).

3.5. – Another important example of a stem in *-ας* that on closer inspection looks like a secondary derivative is γέρας ‘gift of honour’ (Myc., *Il.*+). The hints that **ġerh₂-* is in fact a stem in **-h₂-* and not a root are not as straightforward as they were with κρέας, but I believe they make such an analysis at least possible. First, Hom. again has a neuter plural in short *α* before consonant, but this time it occurs only three times and does not recur in the later literature. Therefore it remains possible that it was only created on the model of κέρᾱ (thus Sommer 1956/57:147). Second, γεραῖός ‘old’ (*Il.*+) is accented like παλαιός, which is built on the adverb πάλαι. This in turn is in my opinion best traced back to an old locative of a stem in **-ā-*. Therefore γεραῖός could imply that an adverb **γέραι*, built on a stem in **-ā-* meaning ‘old age’, once

⁴⁹ Or maybe **kór-u-h₂* (cf. *δοῦρα*). I prefer **kér-u-h₂* because the form should mean ‘gory mass’ and therefore the assumed *u*-stem was probably a proterokinetic adjective rather than an acrostatic noun (on the interaction of these types see recently Widmer 2004:96-100 and *passim*). This agrees well with the renewed form **kréua* which is built according to a proterokinetic pattern.

⁵⁰ Amphikinetic *accentual* pattern is meant in the literal sense here. In most cases the *ablaut* pattern *é-ō/ǝ-ō ~ ǝ-ǝ-é* is associated with this accentuation, but such secondary examples need not necessarily have copied this pattern along with the accentuation. That this pattern ceased to be productive at some point in time agrees well with some of the later restructuring of originally amphikinetic stems that took place in the IE languages (cf. e.g. Gr. μέγας ← **méġ-ōh₂*).

⁵¹ A parallel case is Gr. δρῦς f. ‘tree’, which I suggest to be built on the n. pl. **dór-u-h₂-*.

existed. But given its semantic proximity, παλαιός could have influenced the expected *γεραῖος to give γεραῖός. Still, γεραῖός is the only form in this group with short ε meaning ‘old’ and not ‘honoured’. If the last argument below – that the meaning ‘gift of honour’ of γέρας is caused by the derivation with *-s- – is accepted, this *γεραῖος is better taken as derived from the stem in *-ā-.

Another minor argument can be made of γεραρός ‘honourable, old’ (*Il.*+) with its untypical full grade root. This would be easier to understand if it was derived from a nominal stem, because in other cases where the root vowels of *ro*- and *s*-stems influenced each other, it is usually the zero-grade root of the *ro*-derivative that is generalised. Next, most accounts of γραῦς ‘old woman’ and its dialectal variants (Att. γραῦς, γράός, Ion. γρηῦς/γρηῦς, γρηῖ)⁵² make use of a full grade *gréh₂-.⁵³ This is easier to accept if *gér-h₂- was a stem in *-h₂- and not a root. Finally, a last hint comes from the paradigm of γῆρας ‘old age’ (*Il.*+) with its dative γήρα, which is one of the earliest and best attested of its kind. I prefer to derive these forms from stems in long *-ā-, because the alternative explanation as dative forms in *-eī from stems in -ας is made less plausible by the fact that the stems in *-s- had generalized the locative ending *-i already in Myc. Of course not each and every form in -α proves a stem in long *-ā-, as -α was productive in later times, but some old cases like γήρα (*Od.*+) are in my eyes the reason for this productivity.⁵⁴ If the reconstruction of a stem *γέρα-

⁵² See Peters (1980:252sq. note 210) for a clear synopsis of γραῦς and its derivatives.

⁵³ E.g. *gréh₂-īu - ~ -iū- (Peters 1980:252 note 210). A different approach was proposed by Nussbaum (1976:18): He sets up an amphikinetic stem *gérh₂-ou- ~ *grh₂-ū-és, whose oblique stem developed to *grāū- and had been generalised to the strong cases. This explanation suffers from the fact that it is hard to see what in this framework led to the disyllabicity of Ion. γρηῖς. To avoid this problem one could start from *gréh₂-u- ~ *grh₂-ū- (or *gréh₂-ū-) > *gra'u- ~ *grāū-. Generalisation of *grā- had then led to γρηῖς with preserved hiatus. Again a *schwebeablaut* form *gréh₂- is needed.

⁵⁴ Cf. Nussbaum (1986:45 note 50). He considers to ascribe Att. κέρα to a stem *-ā-, but thinks it to be “overly audacious” and admonishes that *-eī vs. *-i could be due to dialectal variation. I agree with him concerning κέρα, but the case of γήρα is different, because of its early attestation, and the fact that it ended in the paradigm of γῆρας, which continues the abstract meaning I assume for the base *gér-h₂-.

‘old age’ is indeed justified, we can dispose of the purely semantic shift from ‘old age’ to ‘gift of honour’ usually assumed for γέρας. Instead the semantics would be rooted in the derivational pattern: γέρας is ‘the object representing old age’.

3.6. – Now if indeed **ǵér-h₂-* was a nominal stem instead of a root, most people would expect it not to possess primary verbal derivatives. This may in fact be the case, because the Gr. presents γηράσκω (*Od.*+) and γηράω (*X.*+) ‘become old’ can be built on the *s*-aorist ἐγήρα (see Harðarson 1993:72-76), which has a Ved. cognate in *jāriṣur*. In addition, the Ved. presents *jūryati* and *jīryati*, which agree in meaning with the Gr. presents and the *s*-aorist, use the suffix *-ya-*, which is also used in denominative verbs.⁵⁵ This leaves us with the thematic present *járatī*, which unlike the other stems cited so far has transitive meaning. Therefore it is erroneous to reconstruct this present for Gr. too because of γέρων. γέρων and its Ved. cognate *járant-* could not mean ‘old man’ if they were the participle of a transitive verb meaning ‘make old’. In fact the participle associated with *járatī* is *jaráyant-*. Given this, I prefer to understand **ǵérh₂-ont-* as a denominal formation like *mahánt-* ‘great’,⁵⁶ and *járatī* as a transitive back-formation from *jūryati*.⁵⁷

The last question that arises in connection with γέρας is, what the exact interpretation of γῆρας should be. This stem has – unlike most of the neuters in *-ας* – an abstract meaning, and therefore I suggest that it was first created as a regular *s*-stem **γέρος*, which was then influenced by the verbal forms with their long root vowel and by γέρας.

⁵⁵ In my opinion all of them (including the *s*-aorist) can be taken as old (note the archaic look of the *ablaut* pattern between these forms) denominative formations. Rix/Kümmel *et al.* (2001:165) treat these as new formations, because of Ved. *járanti* and the unreliable root aorist *jurátam* (RV 1.182.3).

⁵⁶ See Nussbaum (1976:99sq.) for the secondary formation **méǵ-(o)h₂-ont-* ~ **ǵh₂-nt-* (cf. Lat. *ingens*), and (1976:19) for an account of **ǵérh₂-ont-* that differs from the one presented here only inasmuch as Nussbaum of course assumes it to be a *primary* adjective.

⁵⁷ This is made possible by pairs such as *rána-(ti)* (RV+) ~ *rán̥ya-(ti)* (RV), etc. (see Gotō 1987:59sq.). Since different *ablaut* alternations are found in such pairs, even *jurátam* could be a similar back formation.

4.1. – Having shown that the most important Gr. stems in $-\alpha\varsigma$ ⁵⁸ and the Ilr. neuters in $*-is-$ can be understood without assuming an IE nom.-acc. with zero-grade of the suffix, I can address Schindler's last argument for an original nom.-acc. sg. $**mén-s$. From the possibility of reconstructing a stem with accented \acute{e} -grade of the root and one with zero-grade of the root and e -grade of the suffix he deduces that these two stems belong to a proterokinetic paradigm (Schindler 1975:264). Because the suffix in such a paradigm always contains an unaccented zero-grade in the strong stem, he assumes that the s -stem neuters too once had $*-s-$, and that this was only later replaced by $*-os-$ (1975:265sq.). The motivation for this replacement had been the oddity that in the paradigm $*mén-s \sim *mén-es-os$ (according to Schindler this replacement of $**mn-és-s$ is of earlier date) a monosyllabic and a trisyllabic stem stood side by side. He assumes that in the stems built to set roots $*-s-$ was not replaced because the laryngeals were already vocalised in word final syllable.

4.2. – For a number of reasons I am not convinced by this argumentation. First, the chronology of the replacement of $*-s-$ and the vocalisation of laryngeals is set up completely *ad hoc*. Reflexes of a stem in $*-os-$ are found in most IE languages, whereas the stems in $**H-s-$ are confined to Ilr. and Gr. Second, if the reason to set up $*mén-s$ in the first place was the parallelism with other proterokinetic nominatives, it seems odd to me that this parallelism would have been destroyed by the creation of $*mén-os$.⁵⁹ Third, the parallelism of $*mén-s$ and other proterokinetic strong stems is only apparent. All the relevant stem classes contain a sonant or laryngeal in the suffix, which can be syllabic in the zero-grade too. Therefore except for $*mén-s$ all proterokinetic nom. and acc. have two syllables. To be truly parallel with the other proterokinetic stems, the stems in $*-s-$ had to preserve the syllabicity of their suffix in the nom.-acc. sg. But because in IE syllabic $\dagger s$ apparently did not exist, its closest

⁵⁸ See Meissner (1995:156) for an argumentation why $\delta\acute{\epsilon}\mu\alpha\varsigma$ is not one of them (*pace* Schindler 1975:265).

⁵⁹ When the direct evidence for s -stems with suffixal zero-grade is removed, there is furthermore no reason to assume that the replacement of $**mn-és-s$ by $*mén-es-os$ was of earlier date than that of $*mén-s$ by $*mén-os$. Thus it is not clear whether a monosyllabic and a trisyllabic stem ever did coexist.

equivalent was used. This was of course *-os, since in IE unaccented *o is frequently found in alternation with accented *é.⁶⁰ The directly reconstructed nom.-acc. sg. *mén-os thus conforms to the morphological system of IE. Furthermore I have shown that none of the examples discussed above force us to assume something like ”*kréu_h₂-s“ for IE. To set up an older form **mén-s instead of *mén-os is thus completely unnecessary, and I therefore conclude that *mén-os- was the form of the strong stem beside weak *m(η)n-és-as far back as can be reached by our reconstruction.⁶¹

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⁶⁰ According to Rasmussen (1989:252sq.) this *o reflects an intermediate stage between pre-IE **e and IE *Ø.

⁶¹ Note that the reconstruction *mén-os ~ *mn-és-os still has a proterokinetic accentual pattern. Again *ablaut* pattern and *accentual* pattern are closely connected, but by no means identical (cf. note 50 above).

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